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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,153	07/21/2003	Jens C. Thies	021028-0305107	5213

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EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/623,153

Applicant(s)

THIES ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/27/2004, 9/24/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 and 20-23 is/are allowed.
- 6) ☒ Claim(s) 15 and 19 is/are rejected.
- 7) ☒ Claim(s) 16-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/24/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 15 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the first two lines of claims 15 and 19 are found “a radiation composition, comprising an oxetane, a glycidylether, a cationic photoinitiator, wherein the composition....”. Since there is no “and” or “or” in this list, the wording leaves unclear whether one of the three must be present or all three must be present. Thus, the limits of claims 15 and 19 are indefinite.

2. Claim 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 is as follows:

10	19. A radiation curable composition, comprising an oxetane, a glycidylether, a cationic photoinitiator, wherein the composition is cured to an object with
	actinic radiation and 60 min UV postcure with actinic radiation and 60 min UV
	postcure and wherein the object has a ratio of $F_{wet}/F_{dry} > 0.5$, wherein F_{dry}
	is the Flexural Modulus of the flexural bar after cure and F_{wet} is the Flexural
15	Modulus of a flexural bar after cure and a water treatment, wherein the object
	is submersed in water of 20 °C during 48 hours.

It is unclear whether a radiation curable composition or a method or a cured composition is being claimed here. The use of “is” in “wherein the composition is cured” and the reference to properties of the object formed and its properties leave unclear what category of invention under

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35 USC 101 is being claimed. This problem does not occur in claim 15 because of the wording "wherein the composition after cureshows the following properties...". Thus, in claim 15, the wording is clearly referencing properties of the radiation curable composition if cured in a particular manner.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Schlesinger (3,835,003). With respect to instant claims 15 and 19, the composition of Example 4 of Schlesinger anticipates the instant compositions wherein glycidyl methacrylate – allyglycidylether copolymer is the instant glycidyl ether, 3,3-bis (chloromethyl) oxetane is the instant oxetane compound and 2,5-diethoxy-4- (p-tolyl-thio) benzene diazonium hexafluorophosphate is the cationic photoinitiator. While Schlesinger does not disclose the post cure properties of water absorption, flexural modulus, elongation and Fwer/Fdry ratio, the examiner holds since the composition of Schlesinger has the required components set forth by applicant then it must inherently be curable to the product with the required properties.

5. Claims 17-18 are objected to because of the following informalities: In lines 8 and 9 of claim 17 "0,1" should be --- 0.1 ---. The examiner has assumed a typographical error has occurred or a non-English numeric notation has slipped through. Appropriate correction is required. Claims 17-18 would be allowable if corrected in this manner

6. Claim 1 directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 21-23, directed to the process of using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Claims 21-23 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Since all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement made in the Office action mailed on July 27, 2004 is hereby withdrawn.

7. Claims 1-14, and 20-23 are allowed. The prior art fails to address the percentage limitations placed upon the presence of a cationically curable component having a linking aliphatic ester group limited to 0-29% while having 10-85% of another epoxy group containing component not being a cationically curable component having a linking aliphatic ester group.

8. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cynthia Hamilton
Primary Examiner
Art Unit 1752

November 29, 2004

**CYNTHIA HAMILTON
PRIMARY EXAMINER**